

9/26/03 IDS  
→

PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO		<i>Complete if Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	
(use as many sheets as necessary)		Filing Date	
Sheet	1	of	5
		First Named Inventor	Dempcy, Robert O., et. al.
		Art Unit	
		Examiner Name	
		Attorney Docket Number	

U.S. PATENT DOCUMENTS				
Examiner	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
1	6,127,121		10/3/00	Meyer, Jr., et al.
2	6,177,190		1/5/93	Meyer, Jr., et al.
3	5,512,667		4/30/96	Reed, et al.
4	09/457,616		12/08/99	
5	5,418,966		5/30/95	Reed, et al.
6	5,801,155		9/1/98	Kulyaviv, et al.
7	5,606,251		12/9/97	Arnold, Jr., et al.
8	5,586,481		12/17/96	Arnold, Jr., et al.
9	5,942,010		8/24/99	Nelson, et al.
10	5,736,026		4/7/98	Mullan, et al.
11	3,990,345		12/7/76	Ultman, et al.
12	4,351,760		9/28/82	Khanna, et al.
13	5,645,985		7/8/97	Froehler, et al.
14	5,484,998		1/16/96	Froehler, et al.
15	5,492,806		2/20/96	Dimanac, et al.
16	6,525,464		6/11/96	Dimanac, et al.
17	5,556,749		9/17/96	Mitsuhashi, et al.
18	5,824,796		10/26/98	Peltre, et al.
19	5,210,015		5/11/93	Geltand, et al.
20	5,449,767		9/4/95	Ward, et al.
21	6,312,894		11/6/01	Hedgpeth, et al.
22	4,338,939		11/9/82	Falkow, et al.
23	4,866,105		9/10/89	Urdea, et al.
24	5,124,246		6/23/92	Urdea, et al.
25	4,683,202		7/28/87	Mullis
26	4,683,195		7/28/87	Mullis, et al.
27	4,866,160		1/24/89	Mullis, et al.

*Duplicates*

Examiner Signature	<i>Att. A</i>	Date Considered	08/24/06
--------------------	---------------	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

WC 9046072 v1

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet	2	of	5	Attorney Docket Number
-------	---	----	---	------------------------

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup>	Number <sup>4</sup>			
DUP	28	WO	96/32486			
DUP	29	WO	92/10588			
DUP	30	WO	96/17957			
DUP	31	WO	99/37085			

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
DUP	32	Chen et al., <i>Nucleic Acids Res.</i> , 23:2664-2668 (1995)
DUP	33	Singh et al., <i>Chem. Comm.</i> , 455-456 (1998)
DUP	34	Wengel J., <i>Acc. Chem Res.</i> , 32:301-310 (1998)
DUP	35	Palissa et al., <i>Z. Chem.</i> , 27:218 (1987)
DUP	36	Nielsen et al., <i>Science</i> , 264: 1467-1500 (1994)
DUP	37	Uhlmann et al., <i>Angew. Chem. Int. Ed.</i> , 37:2708-2823 (1998)
DUP	38	Wiemer, D.E. et al., <i>Current Opinion in Structural Biology</i> , 7:355-361 (1997)
DUP	39	Walker, W.L. et al., <i>Biopolymers</i> , 44:323-334 (1997)
DUP	40	Zimmer, C et al., <i>U. Prog. Biophys. Molec. Biol.</i> 47:31-112 (1986)

Examiner Signature	<i>Ruth CL</i>	Date Considered	08/21/06
--------------------	----------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

WC 9046072 v1

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

3

of

5

## Complete if Known

Application Number

Filing Date

First Named Inventor

Dempcy, Robert O., et. al.

Art Unit

Examiner Name

Attorney Docket Number

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
DUP	41	Reddy, et al., <i>Pharmacol. Therap.</i> 84:1-111 (1999)		
DUP	42	Talon, T.A. et al. <i>Science</i> 289:1757-1760 (2000)		
DUP	43	Belov et al., <i>Nuc. Acid Res.</i> 26:3360-3367 (1998)		
DUP	44	Seela et al., <i>J. Chem. Soc. Perkin Trans.</i> , 1:479-488 (1999)		
DUP	45	Ramzaeva et al. <i>Helv. Chim. Acta</i> 80:1809-1822 (1997)		
DUP	46	Vincent et al. <i>J. Org. Chem.</i> , 64:991-997 (1999)		
DUP	47	Beaucage et al., <i>Tetrahedron</i> 48:2223-2311 (1992)		
DUP	48	Seehit, <i>Nucleotide Analogs</i> , John Wiley, New York (1986)		
DUP	49	Uttman et al., <i>Chemical Reviews</i> , 90:343-384 (1990)		
DUP	50	Seela et al., <i>Nucl. Acids Res.</i> , 28:3224-3232 (2000)		
DUP	51	Bottli et al., <i>Nucl. Acids Res.</i> , 24:4660-4667 (1996)		
DUP	52	Sugimato et al., <i>Biochem</i> 34:11211-11216 (1995)		
DUP	53	Santalucia et al., <i>Biochem</i> , 36:10581-10595 (1997)		
DUP	54	Schultz et al., <i>BioTechniques</i> , 27:1218-22 (1999)		

Examiner  
Signature*Rita Al*Date  
Considered

08/24/06

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

WC 9046072 v1

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

4

of

5

## Complete if Known

Application Number	
Filing Date	
First Named Inventor	Dempcy, Robert O., et. al.
Art Unit	
Examiner Name	
Attorney Docket Number	

## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
DVP	56	Owczarzy et al. <i>Biopolymers</i> , 44:217-239 (1997)	
DVP	56	Geisen et al. <i>Nucleic Acids Res.</i> , 26:5004-5006 (1998)	
DVP	57	Blake et al., <i>Bioinformatics</i> , 15:370-5 (1999)	
DVP	58	Van Ness et al., <i>Nucleic Acids Res.</i> , 19:5143-5151 (1991)	
DVP	59	J. Chromatogr., B. <i>Biomed. Sci. Appl.</i> 739:139-150 (2000)	
DVP	60	Draper et al., <i>Biochemistry</i> 18:1774-1791 (1980)	
DVP	61	Pastinen T. et al., <i>Genome Res.</i> , 10:1031-42 (2000)	
DVP	62	Lyamichev et al., <i>Nature Biotechnol.</i> , 17:293-296 (1999)	
DVP	63	Mueller et al., <i>Histochem. Cell Biol.</i> , 108:431-437 (1997)	
DVP	64	Capaldi et al., <i>Nuc. Acids Res.</i> , 28:E21 (2000)	
DVP	65	Eisen, et al., <i>Methods in Enzymology</i> , 303:170-205 (1999)	
DVP	66	Hacia et al., <i>J. Mol. Genet.</i> , 36:730-736 (1999)	
DVP	67	Smith et al., <i>Int. J. Oncol.</i> , 17:841-850 (2000)	
DVP	68	Zhang et al., <i>Nat. Biotechnol.</i> , 18:862-867 (2000)	

Examiner  
Signature*Robert O. Dempcy*Date  
Considered

08/24/06

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>2</sup>Applicant's unique citation designation number (optional). <sup>3</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

WC 9046072 v1

Substitute for form 1449B/PTO				<i>→</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				<b>Complete if Known</b>	
(use as many sheets as necessary)				Application Number	
				Filing Date	
				First Named Inventor	Dempcy, Robert O., et. al.
				Art Unit	
				Examiner Name	
Sheet	5	of	5	Attorney Docket Number	

<b>OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS</b>				
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
DUP	69	Flanagan et al., <i>Nat. Biotechnol.</i> , 14:1139-1145		
DUP	70	Livak et al., <i>PCT Meth. App.</i> 4:357-362 (1995)		
DUP	71	Heid et al., <i>Genome Res.</i> 6:985-994 (1996)		
DUP	72	Taylor et al., <i>Tetrahedron</i> , 48(97):8089-8100 (1992)		
DUP	73	Lohkov, S.G., <i>FEBS Letters</i> 420:134-138 (1997)		
DUP	74	Hall et al., <i>PNAS</i> 97:8272-77 (2000)		

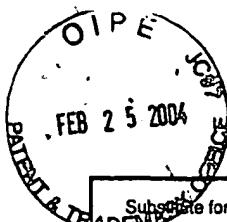
Examiner Signature	<i>Robert O. Dempcy</i>	Date Considered	08/24/06
--------------------	-------------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

WC 9046072 v1



Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if Known</b>	
Sheet	1	of	6	Application Number	10/672,429
				Filing Date	September 26, 2003
				First Named Inventor	Dempcy, Robert O.
				Art Unit	not yet assigned
				Examiner Name	not yet assigned
				Attorney Docket Number	17682A-003650US

<b>U.S. PATENT DOCUMENTS+</b>					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY 12/25/1999	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
LA	1	09/457,616	n/a	Reed et al.	
	2	3,996,345	12-07-76	Ullman, et al.	
	3	4,351,760	09-28-82	Khanna et al.	
	4	4,358,535	11-09-82	Falkow et al.	
	5	4,683,195	07-28-87	Mullis, et al.	
	6	4,683,202	07-28-87	Mullis	
	7	4,800,159	01-24-89	Mullis et al.	
	8	4,868,105	09-19-89	Urdea et al.	
	9	5,124,246	06-23-92	Urdea, et al.	
	10	5,177,196	01-05-93	Meyer, Jr., et al.	
	11	5,210,015	05-11-93	Gelfand, et al.	
	12	5,419,966	05-30-95	Reed, et al.	
	13	5,449,767	09-12-95	Ward, et al.	
	14	5,484,908	01-16-96	Froehler, et al.	
	15	5,492,806	02-20-96	Drmanac, et al.	
	16	5,512,667	04-30-96	Reed, et al.	
	17	5,525,464	06-11-96	Drmanac, et al.	
	18	5,556,749	09-17-96	Mitsuhashi, et al.	
	19	5,578,467	11-1996	Schuster et al.	
	20	5,585,481	12-17-96	Arnold, Jr., et al.	
	21	5,645,985	07-08-97	Froehler, et al.	
	22	5,696,251	12-09-97	Arnold, Jr., et al.	
	23	5,736,626	04-07-98	Mullah, et al.	
	24	5,801,155	09-01-98	Kutyavin et al.	
	25	5,824,796	10-20-98	Petrie, et al.	
	26	5,869,251	02-1999	Schuster et al.	
	27	5,942,610	08-24-99	Nelson, et al.	
	28	6,084,102	07-2000	Kutyavin et al.	
	29	6,127,121	10-2000	Meyer et al.	
	30	6,143,877	11-2000	Meyer et al.	
	31	6,156,501	12-2000	McGall et al.	
	32	6,312,894	11-2001	Hedgpeth et al.	
	33	6,426,408	07-2002	Kutyavin et al.	
	34	6,683,173	01-2004	Dempcy et al.	

<b>FOREIGN PATENT DOCUMENTS</b>					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Country Code <sup>3</sup>	Number <sup>4</sup>		
Examiner Signature	<i>Reed et al</i>			Date Considered	08/24/06

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 801.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.  
 60137947 v1

OIR  
FEB 25 2004  
DEPARTMENT OF COMMERCE  
U.S. PATENT AND TRADEMARK OFFICE

DEMAILED FEB 25 2004  
SUBSTITUTE FOR FORM 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

				Complete If Known	
Application Number				10/672,429	
Filing Date				September 26, 2003	
First Named Inventor				Dempcy, Robert O.	
Art Unit				not yet assigned	
Examiner Name				not yet assigned	
Attorney Docket Number				17682A-003650US	

Sheet 2 of 6

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
RL	35	WO	92/10588		06-1992			<input type="checkbox"/>
	36	WO	96/17957		06-1996			<input type="checkbox"/>
	37	WO	96/32496		10-1996			<input type="checkbox"/>
	38	WO	99/37085		07-1999			<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>

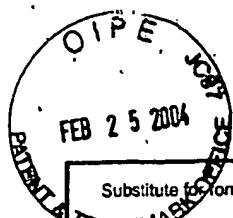
Examiner  
Signature

*RL*

Date  
Considered

08/24/06

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.  
60137947 v1



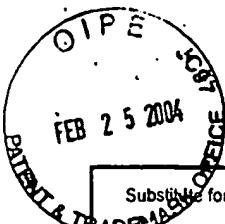
Substitute for Form 1449B/PTO				<b>Complete If Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>					
(use as many sheets as necessary)					
Sheet	3	of	6		
				Application Number	10/672,429
				Filing Date	September 26, 2003
				First Named Inventor	Dempcy, Robert O.
				Art Unit	not yet assigned
				Examiner Name	not yet assigned
				Attorney Docket Number	17682A-003650US

<b>NON PATENT LITERATURE DOCUMENTS</b>				
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
RA	39	Balow et al., <i>Nuc. Acid Res.</i> , 26:3350-3357 (1998)		
	40	Beaucage et al., <i>Tetrahedron</i> 48:2223-2311 (1992)		
	41	Blake et al., <i>Bioinformatics</i> , 15:370-5 (1999)		
	42	Bolli et al., <i>Nucl. Acids Res.</i> , 24:4660-4667 (1996)		
	43	Capaldi et al., <i>Nuc. Acids Res.</i> , 28:E21 (2000)		
	44	Chen et al. <i>Nucleic Acids Res.</i> 23:2661-2668 (1995)		
	45	Draper et al., <i>Biochemistry</i> 19:1774-1791 (1980)		
	46	Eisen, et al., <i>Methods in Enzymology</i> , 303:179-205 (1999)		
	47	Flanagan et al., <i>Nat. Biotechnol.</i> , 14:1139-1145		
	48	Geisen et al. <i>Nucl. Acids Res.</i> , 26:5004-5006 (1998)		
	49	Hacia et al., <i>J. Mol. Genet.</i> , 36:730-736 (1999)		
	50	Hall et al., <i>PNAS</i> 97:8272-77 (2000)		
	51	Heid et al., <i>Genome Res.</i> 6:986-994 (1996)		
	52	J. Chromatogr., B. <i>Biomed. Sci. Appl.</i> 739:139-150 (2000)		
	53	Livak et al., <i>PCT Meth. App.</i> 4:357-362 (1995)		
↓	54	Lohkov, S.G., <i>FEBS Letters</i> 420:134-138 (1997)		

Examiner Signature	<i>Rahul Arl</i>	Date Considered	02/24/08
--------------------	------------------	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



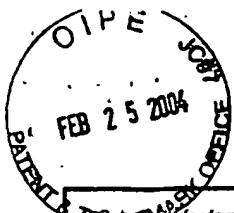
Substitute for form 1449B/PTO				<b>Complete If Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Application Number	10/672,429
(use as many sheets as necessary)				Filing Date	September 26, 2003
				First Named Inventor	Dempcy, Robert O.
				Art Unit	not yet assigned
				Examiner Name	not yet assigned
Sheet	4	of	6	Attorney Docket Number	17682A-003650US

<b>NON PATENT LITERATURE DOCUMENTS</b>				
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
RA	55	Lyamichev et al., <i>Nature Biotechnol.</i> , 17:292-296 (1999)		
	56	Mueller et al., <i>Histochem, Cell Biol.</i> , 108:431-437 (1997)		
	57	Nielsen et al. <i>Science</i> , 254: 1497-1500 (1991)		
	58	Owczarzy et al. <i>Biopolymers</i> , 44:217-239 (1997)		
	59	Palissa et al., <i>Z. Chem.</i> , 27:216 (1987)		
	60	Pastinen T. et al., <i>Genome Res.</i> , 10:1031-42 (2000)		
	61	Ramzaeva et al., <i>Helv. Chim. Acta</i> , 80:1809-1822 (1997)		
	62	Reddy, et al., <i>Pharmacol. Therap.</i> , 84:1-111 (1999)		
	63	Santalucia et al., <i>Biochem</i> , 36:10581-10595 (1997)		
	64	Scheit, <i>Nucleotide Analogs</i> , John Wiley, New York (1980)		
	65	Schutz et al., <i>Biotechniques</i> , 27:1218-22 (1999)		
	66	Seela et al., <i>J. Chem. Soc. Perkin Trans.</i> , I:479-488 (1999)		
	67	Seela et al., <i>Nucl. Acids Res.</i> , 28:3224-3232 (2000)		
	68	Singh et al., <i>Chem. Comm.</i> , 455-456 (1998)		
	69	Smith et al., <i>Int. J. Oncol.</i> , 17:841-850 (2000)		
Y	70	Sugimoto et al., <i>Biochem</i> 34:11211-11216 (1995)		

Examiner Signature	<i>John C.</i>	Date Considered	08/21/06
--------------------	----------------	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



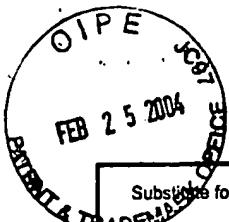
Information Disclosure Statement for form 1449B/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)			<b>Complete If Known</b>		
Sheet	5	of	6	Application Number	10/672,429
				Filing Date	September 26, 2003
				First Named Inventor	Dempcy, Robert O.
				Art Unit	not yet assigned
				Examiner Name	not yet assigned
				Attorney Docket Number	17682A-003650US

<b>NON PATENT LITERATURE DOCUMENTS</b>				
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
RD	71	Taton, T.A. et al., <i>Science</i> , 289:1757-1760 (2000)		
	72	Taylor et al., <i>Tetrahedron</i> , 48(37):8089-8100 (1992)		
	73	Uhlman et al., <i>Chemical Reviews</i> , 90:543-584 (1990)		
	74	Uhlmann et al. <i>Angew. Chem. Ing. Ed.</i> 37:2796-2823 (1998)		
	75	Van Ness et al., <i>Nucleic Acids Res.</i> , 19:5143-5151 (1991)		
	76	Vincent et al. <i>J. Org. Chem.</i> , 64:991-997 (1999)		
	77	Walker, W.L. et al., <i>Biopolymers</i> , 44:323-334 (1997)		
	78	Wemmer, D.E. et al., <i>Current Opinion in Structural Biology</i> , 7:355-361 (1997)		
	79	Wengel J., <i>Acc. Chem Res.</i> , 32:301-310 (1998)		
	80	Zhang et al., <i>Nat. Biotechnol.</i> , 18:862-867 (2000)		
	81	Zimmer, C et al., <i>U. Prog. Biophys. Molec. Bio.</i> 47:31-112 (1986)		
	82	Breslauer, K. J. et al.: "Predicting DNA duplex stability from the base sequence"; <i>Proc. Nat. Acad. Sci.</i> ; 83:3746-3750 (1986)		
	83	Chen, H. et al.: "Computer program for calculating the melting temperature of degenerate oligonucleotides used in PCR or hybridization"; <i>BioTechniques</i> ; 22:6:1158-1160 (1997)		
✓	84	Le Novere, N.: "MELTING, computing the melting temperature of nucleic acid duplex" <i>Bioinformatics</i> ; 17:12:1226-1227 (2001)		

Examiner Signature	<i>Robert O. Dempey</i>	Date Considered	08/28/06
--------------------	-------------------------	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449B/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>					
Sheet	6	of	6	Application Number	10/672,429
				Filing Date	September 26, 2003
				First Named Inventor	Dempcy, Robert O.
				Art Unit	not yet assigned
				Examiner Name	not yet assigned
				Attorney Docket Number	17682A-003650US

Examiner Signature	<i>Atte Al</i>	Date Considered	08/24/06
--------------------	----------------	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449A/PTO-1449A <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/672,429
				Filing Date	September 26, 2003
				First Named Inventor	Dempcy, Robert O.
				Art Unit	1623
				Examiner Name	Not yet assigned
Sheet	1	of	2	Attorney Docket Number	17682A-003650US

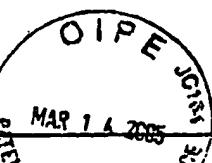
<b>U.S. PATENT DOCUMENTS+</b>					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
RA	A1	US-5,594,121	01-1997	Froehler et al.	
	A2	US-5,849,482	12-1998	Meyer et al.	
↓	A3	US-6,339,147	01-2002	Lukhtanov et al.	
	A4	US-10/302,607	11/20/2002	Petrie et al.	

<b>FOREIGN PATENT DOCUMENTS</b>					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number <sup>4</sup>			
RA	B5	WO 84/03285	08-30-1984	Molecular Biosystems	<input type="checkbox"/>
	B6	WO 90/03370	05-05-1990	Microprobe Corporation	<input type="checkbox"/>
↓	B7	WO 97/46313	12-11-1997	Array Technologies	<input type="checkbox"/>
	B8	WO 98/49180	11-05-1998	Epoch Pharmaceuticals, Inc.	<input type="checkbox"/>
	B9	WO 99/51775	10-14-1999	Epoch Pharmaceuticals, Inc.	<input type="checkbox"/>
	B10	WO 99/51621	10-14-1999	Epoch Pharmaceuticals, Inc.	<input type="checkbox"/>
↓	B11	WO 00/06771	02-10-2000	Affymetrix, Inc.	<input type="checkbox"/>
	B12	WO 02/12263	02-14-2002	Roche Diagnostics	<input type="checkbox"/>
↓	B13	EP 1103910 A1	05-30-2001	Schütz et al.	<input type="checkbox"/>

Examiner Signature	<i>Robert O.</i>	Date Considered	08/24/06
--------------------	------------------	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

60440755 v1



Substitute for form 1449B/PTO				<i>Complete if Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>					
(use as many sheets as necessary)					
Sheet	2	of	2		
				Application Number	10/672,429
				Filing Date	September 26, 2003
				First Named Inventor	Dempcy, Robert O.
				Art Unit	1623
				Examiner Name	Not yet assigned
				Attorney Docket Number	17682A-003650US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
RA	C14	CLERCQ, E.D. et al. "Nucleic Acid Related Compounds. 40. Synthesis and Biological Activities of 5-Alkynyluracil Nucleosides," <i>J. Med. Chem.</i> , Vol. 26, No. 5:661-666 (1983)		
	C15	CRUICKSHANK, K.A. et al. "Oligonucleotide Labelling: A Concise Synthesis Of A Modified Thymidine Phosphoramidite," <i>Tetrahedron Letters</i> , Vol. 29 No. 41, pp 5221-5224 (1988)		
	C16	GRAHAM, D. et al. "DNA duplexes stabilized by modified monomer residues: synthesis and stability," <i>J. Chem. Soc., Perkin Trans.</i> , 1:1131-1138 (1998)		
	C17	HOBBS, F. W., Jr. "Palladium-Catalyzed Synthesis of Alkynylamino Nucleosides. A Universal Linker for Nucleic Acids," <i>J. Org. Chem.</i> , 54:3420-3422 (1989)		
	C18	ROBINS, M.J. et al. "Nucleic Acid Related Compounds. 39. Efficient Conversion of 5-Iodo to 5-Alkynyl and Derived 5-Substituted Uracil Bases and Nucleosides," <i>J. Org. Chem.</i> , 48:1854-1862 (1983)		
	C19	SEELA, F. et al. "131. 8-Aza-7-deaza-2'-deoxyguanosine: Phosphoramidite Synthesis and Properties of Octanucleotides," <i>Helvetica Chimica Acta</i> , Vol. 71:1191-1197 (1988)		
	C20	SEELA, F. et al. "8-AZA-7-Deazapurine DNA: Synthesis And Duplex Stability Of Oligonucleotides Containing 7-Substituted Bases," <i>Nucleosides &amp; Nucleotides</i> , 18(6&7):1399-1400 (1999)		
	C21	SEELA, F. et al. "Duplex Stability Of Oligonucleotides Containing 7-Substituted 7-DEAZA- AND 8-AZA-7-Deazapurine Nucleosides," <i>Nucleosides &amp; Nucleotides</i> , 16(7-9):963-966 (1997)		
	C22	SEELA, F. et al. "Oligonucleotides Containing Pyrazolo [3,4-d] pyrimidines: The Influence of 7-Substituted 8-Aza-7-deaza-2'-deoxyguanosines on the Duplex Structure and Stability," <i>Helvetica Chimica Acta</i> , Vol. 82:1640-1655 (1999)		
	C23	SEELA, F. et al. "Synthesis of 7-alkynylated 8-aza-7-deaza-2'-deoxyadenosines via the Pd-catalysed cross-coupling reaction," <i>J. Chem. Soc., Perkin Trans.</i> , 1:3233-3239 (1998)		
✓	C24	SEELA, F. et al. "The Influence of Modified Purine Bases on the Stability of Parallel DNA," <i>Bioorganic &amp; Medicinal Chemistry Letters</i> , 10:289-292 (2000)		

Examiner Signature	<i>Robert O. Dempcy</i>	Date Considered	03/29/06
--------------------	-------------------------	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.